



### Basic Facts About Asthma

#### What Asthma Is

Asthma is a disease that affects your lungs. It is the most common long-term disease of children. It causes repeated episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. It is with you all the time, but you may have asthma attacks only when something bothers your lungs.

We know that family history contributes to susceptibility, but in most cases we don't know what causes asthma to develop, and we don't know how to cure asthma. You can control your asthma by knowing the warning signs of an attack, avoiding things that trigger an attack, and following the advice of your doctor. When you control your asthma, you won't have symptoms like wheezing or coughing, you'll sleep better, you won't miss work or school, you'll be able to take part in all physical activities, and you won't have to visit the hospital.

#### Effects of Asthma

In 2001, 20.3 million Americans had asthma, and 12 million had had an asthma attack in the previous year. If a person has a parent with asthma, he or she is three to six times more likely to develop asthma than is a person who does not have a parent with asthma.

#### How Asthma Is Diagnosed

Asthma can be difficult to diagnose, especially in children under 5 years old. Regular physical exams that include checks of lung function and for allergies can help make the right diagnosis.

A health-care provider trying to diagnose asthma will ask you questions about coughing, especially coughing at night, and whether breathing problems are worse after physical activity or during a particular time of year. Providers also ask about other symptoms, such as chest tightness, wheezing, and colds that last more than 10 days.

Also, a provider will ask about your family history of asthma, allergy and other breathing problems, and your home environment. He or she also will ask about lost school or work days and limits on your activity.

Testing of lung function, called spirometry, is another way to diagnose asthma. A spirometer is a piece of equipment that measures the largest amount of air you can exhale after taking a very deep breath. Airflow can be measured before and after you use an asthma medication.

#### What An Asthma Attack Is

Airways are the paths that carry air to the lungs. As the air moves through the lungs, the airways become smaller, like branches of a tree. During an attack, the sides of the airways in your lungs become inflamed and swollen. Muscles around the airways tighten, and less air passes in and out of the lungs. Excess mucus forms in the airways, clogging them even more. The attack, also called an episode, can include coughing, chest tightness, wheezing, and trouble breathing.

#### Causes Of An Asthma Attack

Environmental exposures, such as house dust mites and environmental tobacco smoke, are important triggers of an attack. Some of these triggers are listed in the box below.

#### How Asthma Is Treated

You can control your asthma and avoid an attack by taking your medicine as prescribed and avoiding the triggers that can cause an attack. It's just as important that you remove the triggers in your environment that you know make your asthma worse.

Medicine for asthma is different for each person. It can be inhaled or taken as a pill and comes in two types—quick-relief and long-term control. Quick-relief medicines control the symptoms of an asthma attack. If you are using your quick-relief medicines more and more you should visit your health-care provider to change your asthma management plan. Long-term control medicines make you have fewer and milder attacks, but they don't help you if you're having an attack.

Asthma medicine can have side effects. Most are mild and go away on their own. Ask your health-care provider about the side effects of your medicines.

## Asthma FAQ

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The important thing to remember is that you can control your asthma. With your health-care provider's help, make your own asthma management plan so you know what to do based on your own symptoms. Decide who should have a copy of your plan and where he or she should keep it. You can learn more about asthma management plans from the American Academy of Family Physicians (<http://familydoctor.org/x2272.xml>). And remember to take your long-term control medicine even when you don't have symptoms.

Important Asthma Triggers
<b><i>Environmental Tobacco Smoke, Also Known As Secondhand Smoke</i></b> Parents, friends, and relatives of children with asthma should try to stop smoking. Until they can successfully quit, they should smoke only outdoors, not in the home or in the family car. They should not allow others to smoke in the home, and should make sure the child's school is smoke-free.
<b><i>Dust Mites</i></b> Mattress covers and pillow case covers provide a barrier between house dust mites and the person with asthma. Down-filled pillows, quilts, or comforters should not be used and stuffed animals and clutter should be removed from bedrooms.
<b><i>Outdoor Air Pollution</i></b> Pollution caused by industrial emissions and automobile exhaust can cause an asthma episode. In large cities that have air pollution problems the number of emergency department visits for asthma episodes goes up when the air quality is very poor.
<b><i>Cockroach Allergen</i></b> Decreasing exposure to cockroaches in the home can help reduce asthma attacks. You may find cockroaches any place where food is eaten and crumbs are left behind. Remove as many water and food sources as you can because cockroaches need food and water to survive. Vacuum or sweep these areas at least every 2-3 days. You can also use roach traps or gels to decrease the number of cockroaches in your home.
<b><i>Pets</i></b> Furry pets may trigger an attack. The simplest solution to this situation is to find another home for the pet. However, some pet owners may be too attached to their pets or unable to locate a safe new home for the animal. Any animal causing an allergic reaction should not be allowed in the bedroom. Pets should be kept outside as much as possible and bathed weekly. People with asthma are not allergic to their pet's fur, so trimming the pet's fur will not help your asthma. Frequent vacuuming will reduce the presence of the allergen. If the room has a hard surface floor, it should be damp mopped weekly.
<b><i>Mold</i></b> When mold is inhaled, it can cause asthma attacks. Eliminating mold throughout the home can help control asthma attacks. Keep humidity levels between 35% and 50%. In hot, humid climates, this may require the use of air conditioning and/or dehumidifiers. Fixing water leaks and cleaning up any mold in the home can also help.
<b><i>Other Triggers</i></b> Strenuous physical exercise; adverse weather conditions like freezing temperatures, high humidity, and thunderstorms; and some foods and food additives and drugs can trigger asthma episodes. Strong emotional states also can lead to hyperventilation and an asthma episode. People with asthma should learn if these things trigger their episodes and avoid them when possible.

For more information, please contact:

CDC/National Center for Environmental Health  
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